



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105

N00217.003145
HUNTERS POINT
SSIC NO. 5090.3

November 2, 1995

William Radzevich
Remedial Project Manager
Engineering Field Activity, West
900 Commodore Drive
San Bruno, CA 94066-5006

RE: Draft Record of Decision, Parcel A, Hunters Point Annex

Dear Mr. Radzevich:

EPA has reviewed the Draft Record of Decision for Parcel A, Hunters Point Annex. Our comments are presented directly on the enclosed pages of the draft document or below.

EPA comments primarily focus on three areas: 1) Lack of incorporation of a few of the comments made by EPA on the preliminary draft ROD (EPA letter to Navy dated September 25, 1995). and 2) New Comments on the draft ROD, and 3) the Responsiveness Summary. Also, since the RWQCB is a signatory to the FFA, it is appropriate that they be included in the concurrence block of signatures on page 3 of the ROD declaration statement.

EPA Comments on the Preliminary Draft ROD not Addressed in the Draft ROD:

- o Please note that the Navy need not include so much detail in the declaration statement. Please review exhibit 9-2 of EPA guidance on preparing decision documents (copy enclosed in EPA letter to Navy of September 25, 1995).
- o Scope and Role of the Operable Unit. This section needs to be redrafted. Please see EPA's original comments (copy enclosed.) Also - why were the FFA dates removed? This section is designed to discuss Parcel A in terms of how it fits in with the overall project organization, strategy and schedule.

New Comments:

- o Please ensure that for both the SI and RI site descriptions when the text states "in summary, no further action is necessary..." we briefly add on "because...." to clearly explain and summarize why nothing further is required.

For example, Page 9, summary paragraph for section 2.2.2, please add the reasons why no further investigation or action

was required for the SI sites. That is, briefly state that 1) nothing found, or 2) contamination below levels of concern or where above, investigation by excavation was performed thereby removing contamination to ensure residuals at protective levels.

I have made similar comments directly on the enclosed draft ROD pages for your convenience.

- o Page 21, Navy should include language in Section 2.7 to explain why no further action is appropriate. Many readers may only review this section of the ROD. This section should describe the alternative and tie the whole story together. This section should reiterate that excavation by investigation occurred, residuals soils at protective levels, no pathway for groundwater, etc.

In addition, the Navy should consider adding language regarding deed notification to the "Description of the No Action Alternative" section of the ROD. The navy could state that in response to comments received from the State, the navy is currently working to develop language regarding a deed notification for motor oil in Parcel A groundwater and that this language will be formalized before the conclusion of the real estate transfer process for Parcel A. Since the issue is discussed in the responsiveness summary, it is appropriate to briefly mention its resolution in the body of the ROD.

Responsiveness Summary:

- o Where possible, always try to concisely answer a question or comment right off the bat. If the Navy can first respond with a yes or no and then proceed with a more detailed explanation, the responses will be more clear and better received. EPA is happy to provide assistance in rewriting some of these responses. Please feel free to contact me.
- o EPA's toxicology staff has reviewed the responsiveness summary comments and responses that deal with the Parcel A risk assessment approaches and confirmed that they are consistent with those presented in the remedial investigation report.

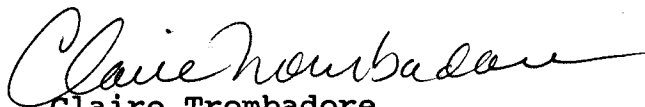
However, the responses should be revised to more directly answer the questions/comments. For example, the ARC Ecology response #1 on page A-6 should include discussion of the CERCLA 120(h)(3) requirement that the Federal government will accept responsibility for any future discoveries of waste known to have been on the site before transfer. This response should further clarify that despite this covenant, the Navy has determined that all known contamination on Parcel A has been investigated and addressed as appropriate and that onsite conditions today at Parcel A are protective of human health and the environment.

Another example would be the response to Ms Brownell's comment #3 on page A-12. The first paragraph of this response can be deleted as the second paragraph contains all of the same pertinent information and presents it in a more direct fashion.

- o Page A-2, line 2. "Therefore, the report was not finalized." This statement is confusing, because it is not apparent whether "the report" refers to the Parcel A RI/FS or just the FS. Please specify that the FS was deleted and the Parcel A RI was finalized and why.
- o Page A-3, paragraph 5. The response to the issue "Did the Navy adequately investigate Parcel A?" should first state "Yes" and then be expanded to include information on how it was determined that areas were suspected to be contaminated and how buildings/areas with little or no information were eliminated. The response should include references to where additional information on each building or facility can be found.
- o Page A-3, paragraph 7. The response to the issue "Can the Navy speed up the process of transferring the property at Hunters Point Annex?" does not answer the question raised. The answer should include a "Yes" or "No" in addition to an explanation. As the response currently stands, the reader is uncertain whether the Navy has tried to expedite the process, will try to expedite the process, or is unable to speed up the process.
- o Pages A-9 and A-10. The last line on page A-9 is repeated at the top of page A-10. Please correct this.
- o Page A-13, paragraphs 1 and 2. In the first paragraph, "a child consumes 12 pounds of vegetable and 18 pounds of fruit per year," while the second paragraph the text reads "a child is assumed to consume...12 pounds of fruits and 18 pounds of vegetables. These statements contradict one another. Please be consistent.

Should you have any questions about these comments, please do not hesitate to contact me at (415) 744-2409.

Sincerely,



Claire Trombadore
Remedial Project Manager

cc: Cyrus Shabahari, Cal/EPA
Jim Sickles, PRC
Mike McClelland, Navy
Karla Brasaemle

1.0 DECLARATION FOR NO ACTION AT PARCEL A

1.1 SITE NAME AND DESCRIPTION

Hunters Point Annex, Parcel A
San Francisco, California

Hunters Point Annex (HPA) was deactivated and placed in industrial reserve in 1974. In 1989, this federal facility was placed on the National Priorities List (NPL). In 1991, HPA was selected and approved for closure under the Base Realignment and Closure (BRAC) program.

1.2 STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial action for Parcel A at HPA. The selected remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the administrative record for the site.

The U.S. Environmental Protection Agency (EPA) and the ~~State of California~~ ^{California Env. Prot. Agency (Cal/EPA)} concur with the selected remedy.

1.3 DESCRIPTION OF THE SELECTED REMEDY: NO ACTION

The U.S. Department of the Navy (Navy) and EPA Region IX have selected no action for the following sites at Parcel A of HPA:

- **IR-59:** The groundwater underlying Parcel A
- **IR-59 Jerrold Avenue Investigation (JAI):** The soil at a residential lot on Jerrold Avenue within Parcel A

These sites are the only two sites at Parcel A that were carried through to the remedial investigation (RI) stage. All other sites investigated at Parcel A were determined by the Navy, EPA, and Cal/EPA to require no action at the conclusion of the site inspection (SI) stage of investigation. The Navy's selection of no action for the RI sites ^{documents} effectively reflects the Navy's determination that the overall condition of Parcel A is protective of human health and the environment. X

1.4

DECLARATION STATEMENT

Based on an evaluation of analytical data and other information, the Navy has determined that no remedial action is necessary to ensure the protection of human health and the environment at Parcel A. EPA Region IX and the California Environmental Protection Agency (Cal/EPA) concur with the Navy's determination. Specifically, this ROD selects the final remedy for sites IR-59 and IR-59 JAI at Parcel A. The groundwater underlying Parcel A (IR-59) is not a potential source of drinking water. The concentrations of semivolatile organic compounds (SVOC) and metals detected in groundwater samples did not exceed EPA Region IX preliminary remediation goals (PRG). The only other substance detected, motor oil, is a petroleum product specifically excluded from the definition of "hazardous substance" and "pollutant or contaminant" in Section 101 of CERCLA. Although the State of California has authority to regulate the remediation of motor oil in groundwater, the State concurs that the levels in groundwater do not require further investigation, remediation, or groundwater monitoring (California Regional Water Quality Control Board, San Francisco Bay Region [RWQCB] 1995b). The concentrations of hazardous substances in the soil at IR-59 JAI are either within or below EPA's acceptable risk levels or, for metals, are at ambient levels. There are no other sites in Parcel A that require investigation or remediation. Accordingly, because hazardous

substances are not present at Parcel A at concentrations above acceptable risk levels, the 5-year review requirement of CERCLA Section 121(c) does not apply.

Mr. Michael McClelland
Navy BRAC Environmental Coordinator
Naval Facilities Engineering Command, Engineering
Field Activity West

Date

Ms. Julie Anderson
Chief, Federal Facilities Cleanup Office
EPA Region IX

Date

Mr. Anthony J. Landis
Chief of Operation, Office of Military Facilities
Department of Toxic Substances Control
Cal/EPA

Date

RWQCB

2.0 DECISION SUMMARY FOR PARCEL A

2.1 SITE NAME, LOCATION, AND DESCRIPTION

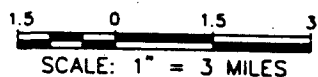
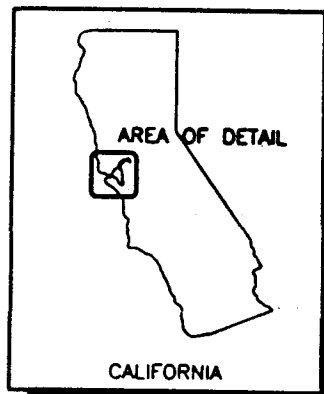
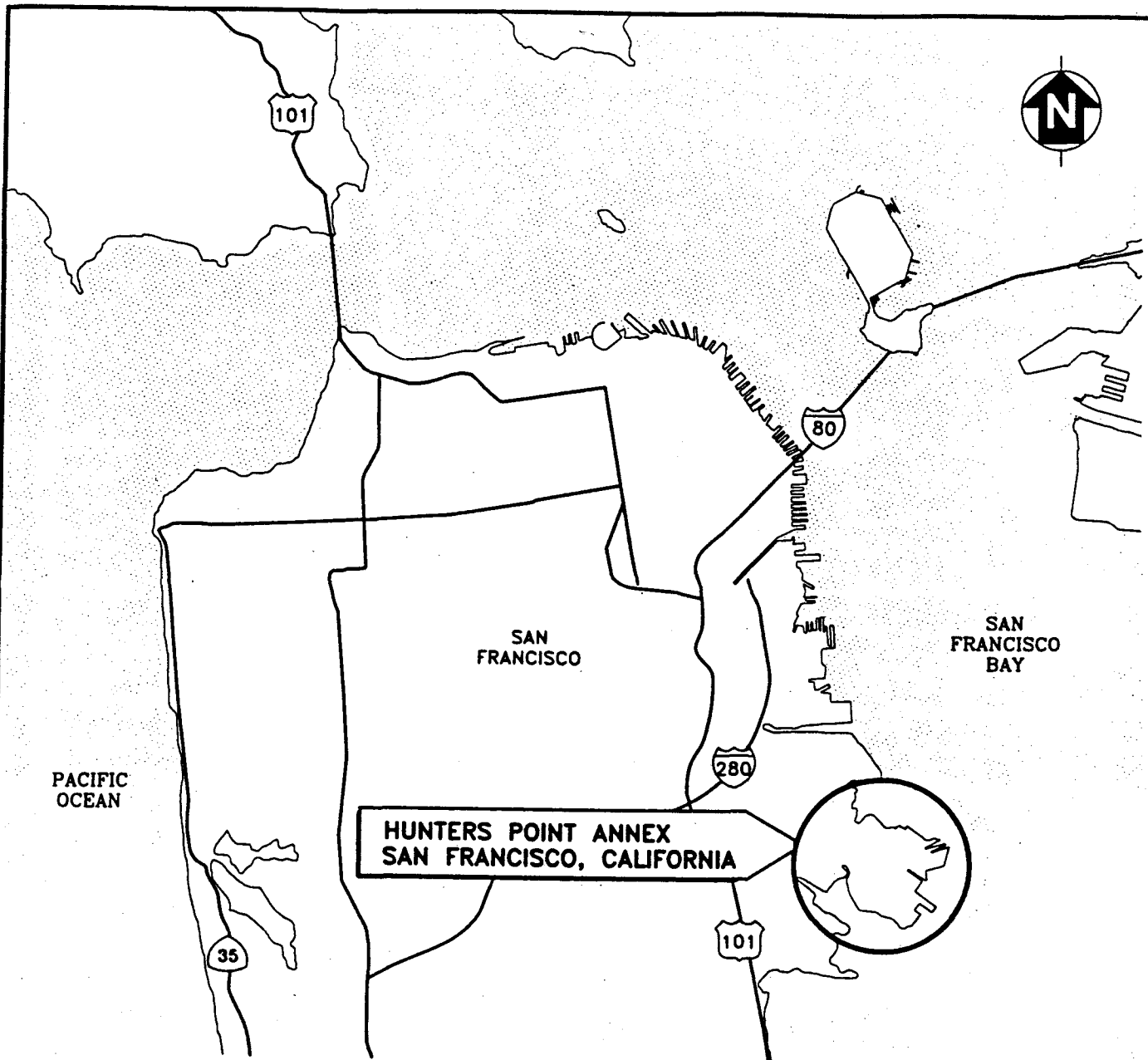
HPA is located on a promontory in southeast San Francisco (Figure 1). The promontory is bounded on the north and east by the San Francisco Bay and on the south and west by the Bayview-Hunters Point district of the City of San Francisco. The entire HPA covers 936 acres, 493 of which are on land and 443 of which are under water. To facilitate the environmental investigation and remediation, and ultimate transfer of the property, HPA was divided into several parcels (Parcels A through F) (Figure 2). This ROD addresses the remedy for sites at Parcel A.

Parcel A is bounded by the other portions of HPA and the Bayview-Hunters Point district (Figure 3). Parcel A covers approximately 88 acres. Land to the northwest of Parcel A is used for residential purposes. The other HPA parcels that bound Parcel A are currently undergoing investigation and remediation for future redevelopment. Under the local reuse authority's land-use plan, those parcels will ultimately be used primarily for commercial and industrial purposes, whereas Parcel A will be used for residential as well as for light commercial purposes.

Parcel A consists of the upland area of HPA and a portion of the lowlands. Ground surface elevations at Parcel A range from 0 to 18 feet above mean sea level (msl) in the lowlands to 180 feet above msl at the ridge crest.

The peninsula forming HPA is within a northwest-trending belt of Franciscan bedrock. Bedrock is present at the ground surface over most of Parcel A. In localized areas, the bedrock is overlain by fill material.

No wetlands or surface waters are located at Parcel A. Limited quantities of groundwater are present in localized fractures of the bedrock. However, Parcel A groundwater is not suitable as a potential source of drinking water because of low well yield. Groundwater from the bedrock aquifer discharges through springs and seeps along Parcel A slopes.



HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

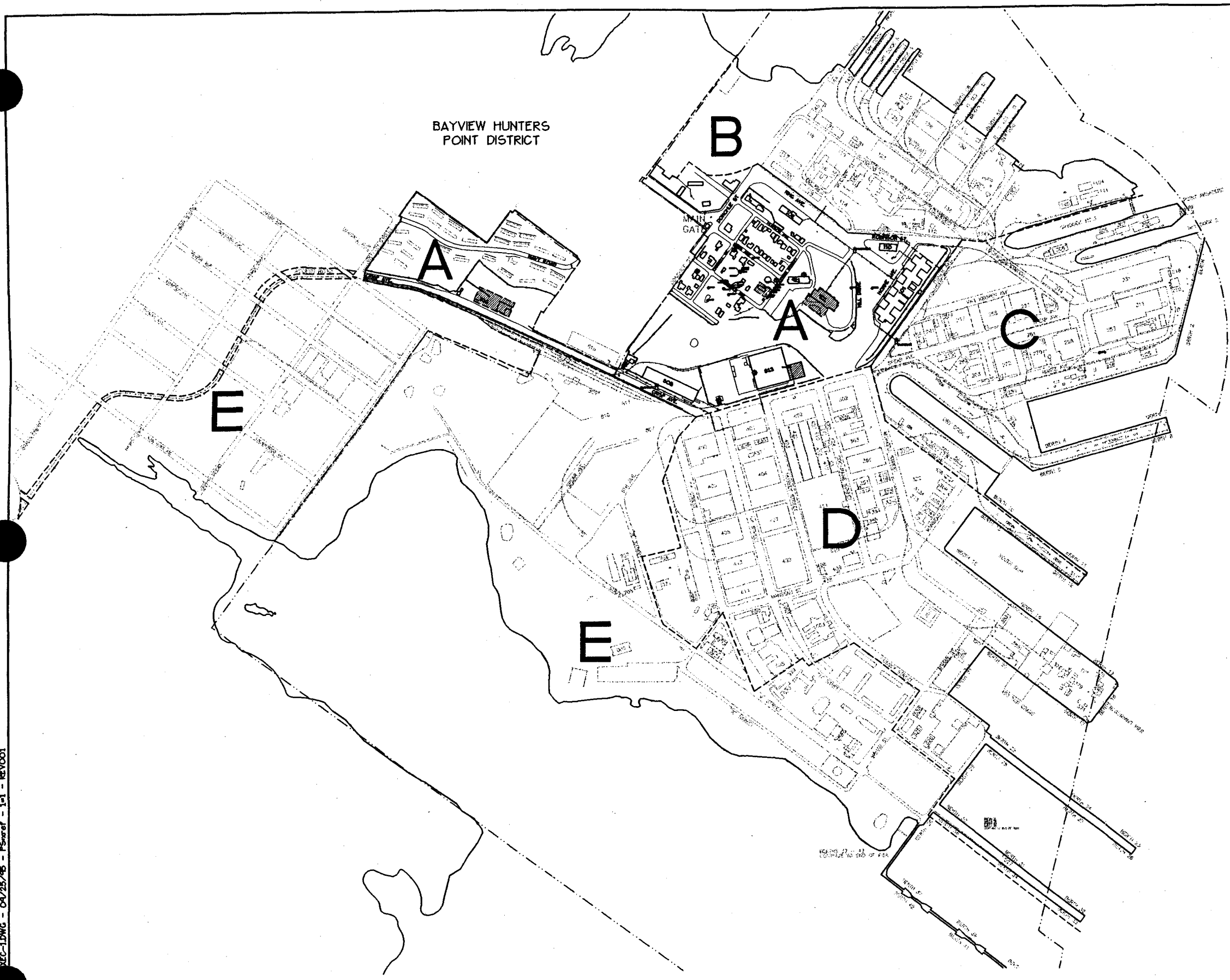
FIGURE 1
FACILITY
LOCATION MAP

PRC ENVIRONMENTAL MANAGEMENT, INC.

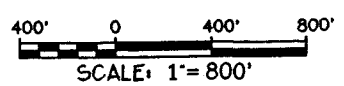


BAYVIEW HUNTERS
POINT DISTRICT

SAN FRANCISCO
BAY



Legend
----- PARCEL BOUNDARY



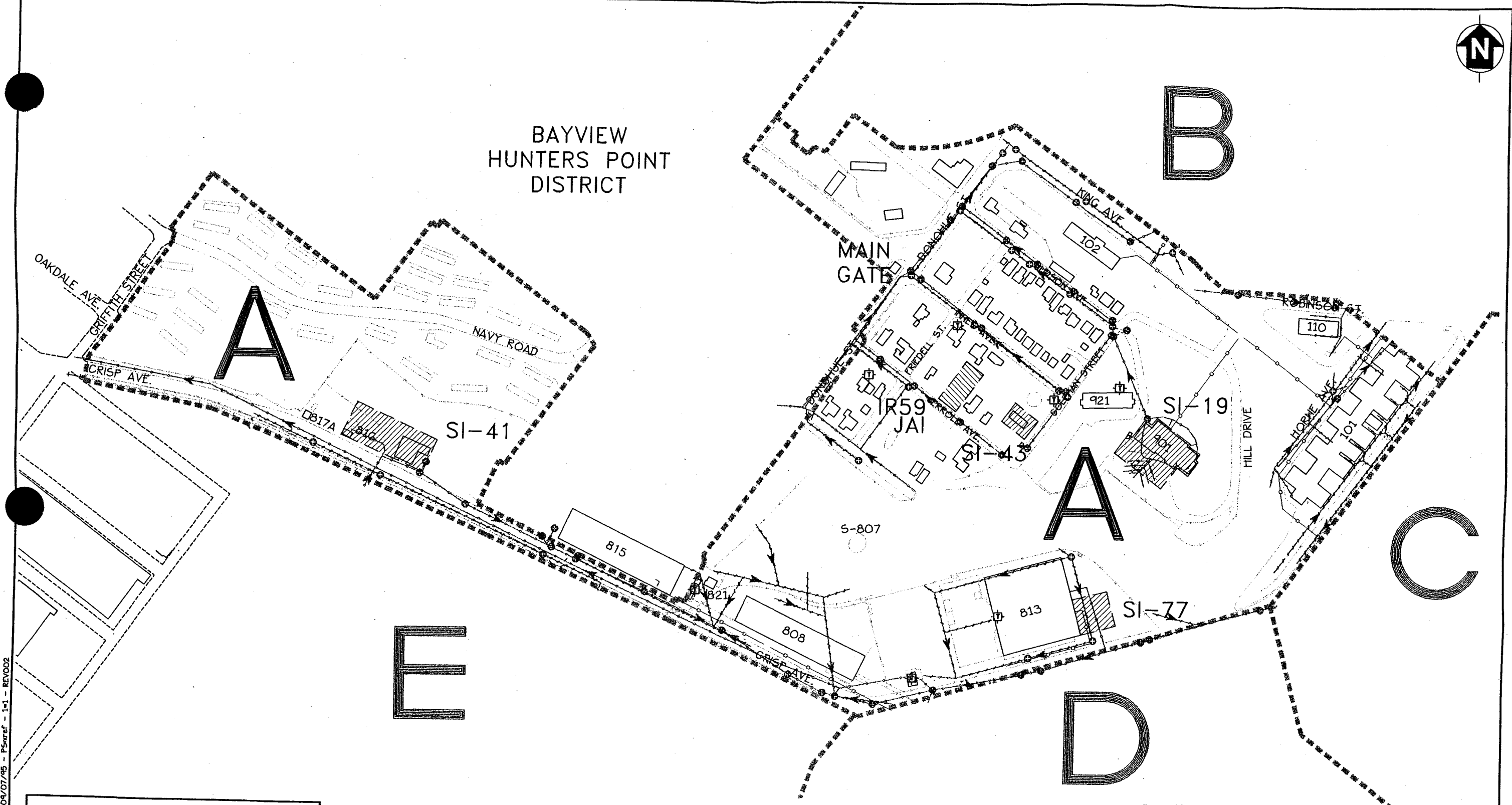
NOTE: PARCEL F IS OFFSHORE AREA OF HPA

HUNTERS POINT ANNEX SAN FRANCISCO, CALIFORNIA
FIGURE 2 HUNTERS POINT ANNEX PARCEL LOCATION MAP
PRC ENVIRONMENTAL MANAGEMENT, INC.

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BAYVIEW
HUNTERS POINT
DISTRICT



Legend

	STEAM LINE (SI-45)
	PARCEL BOUNDARY
	TRANSFORMER LOCATION (SI-51)
	SEWER LINES (SI-50)
	STORM LINES (SI-50)

NOTE: *
1948, SAN FRANCISCO NAVAL SHIPYARD,
CONTROL DIAGRAM STEAM AND CONDENSATE
LINES. P.W. DRAWING NO. 16013-137

150' 0 150' 300'
SCALE: 1"=300'

HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

FIGURE 3
PARCEL A
SITE MAP

PRC ENVIRONMENTAL MANAGEMENT, INC.

No underground storage tanks (UST), aboveground tanks, drums, or hazardous materials storage areas are located at Parcel A. Sewer lines, storm drains, and steam lines located in Parcel A were included in the early investigations of the property, which found no further investigation was required.

2.2 SITE HISTORY

2.2.1 Background

Hunters Point was first developed for dry dock use in 1867. The Navy acquired title to the land in 1940 and began developing the area for various shipyard activities. In 1942, the Navy began using HPA for shipbuilding, repair, and maintenance. From 1945 to 1974, the shipyard was primarily used as a repair facility by the Navy. The Navy discontinued activities at HPA in 1974. From 1976 to 1986, the Navy leased 98 percent of HPA, including all of Parcel A, to the Triple A Machine Shop (Triple A), a private ship repair company. In 1986, the Navy reoccupied the property. Currently, portions of Parcel A are subleased for use as artists' studios.

Throughout its history, both the Navy and Triple A used Parcel A primarily for residential purposes. In addition, the Navy used one building on Parcel A as a radiation laboratory. Most of the other structures were used as offices and warehouses. Currently, approximately 61 buildings are located on the property, 45 of which are former residences. In addition, the foundations of 43 other structures are located on Parcel A.

The Navy began environmental studies at HPA in 1984 under the U.S. Department of Defense's Installation Restoration Program. Between 1984 and 1991, the Navy performed a series of installation-wide investigations to identify potential source areas and to investigate air quality (WESTEC Services, Inc. 1984; Aqua Terra Technologies [ATT] 1987; EMCON Associates 1987; Environmental Resources Management, West 1988; YEI Engineering, Inc. 1988a and 1988b; Harding Lawson Associates [HLA] 1992; Brown & Caldwell 1995). In addition, the Navy conducted investigations in discrete areas of Parcel A (HLA 1987 and 1988; ATT 1987).

In 1989, EPA added HPA to the NPL. In 1990, the Navy, EPA Region IX, and the State of California entered into a Federal Facilities Agreement to coordinate environmental activities at HPA. In 1991, the U.S. Department of Defense designated HPA for closure as an active military base under its BRAC program.

2.2.2 Site Inspection Activities at Parcel A

As the first phase in the CERCLA process, the Navy conducted a preliminary assessment/site inspection (PA/SI) of seven potential source areas identified during the Navy's previous investigations. Site-specific histories of each of these areas, referred to as SI sites, are provided below.

Parking medians in front of Building 901: The landscaped medians in front of Building 901, the Officers' Club, were identified as a potential source because the medians were filled in part with sandblast waste and oily materials. The medians are referred to as site SI-19.

Buildings 816 and 818: Building 816 is the former Naval Radiological Defense Laboratory (NRDL) High Voltage Accelerator Laboratory. The NRDL ^{conducted operations at the bldg} operated until 1976. Because of the presence of a former drum storage area behind Building 816, the area was identified as a potential source area. Building 818 is the former Chlorinating Plant used for chlorinating water. These buildings and the surrounding areas are designated as site SI-41.

Former Building 906: Building 906, the Gardening Tool House, may have been used to store pesticides. For this reason, the building was identified as a potential source area. It is designated as site SI-43.

Portions of the steam line system within Parcel A: The steam line system, constructed in 1950, spans the entire installation. The system was used to supply steam to heat facility buildings and docked ships and to facilitate the flow of oil through oil lines. Steam for Parcel A was generated at boiler plants located on other parcels. The Navy identified the lines as a potential source based on the remote possibility that waste oil was transported through the Parcel A steam lines. The HPA-wide steam line system is designated as site SI-45.

Portions of the storm drain and sanitary sewer systems within Parcel A: The storm drain and sanitary sewer systems for HPA were constructed in the 1940s and 1950s as a combined system. By 1976, the two systems had been separated. Currently, the storm drains at Parcel A flow into storm drains at other parcels, eventually discharging into San Francisco Bay. Flow from the sanitary sewer system is directed to Pump Station A, which pumps sewage off site for treatment and ultimate discharge through the City of San Francisco's publicly-owned treatment works. The HPA-wide system is referred to as site SI-50.

Locations of transformers containing polychlorinated biphenyls: Buildings and areas throughout HPA where transformers containing polychlorinated biphenyls (PCB) were located are referred to as site SI-51. At Parcel A, a visual inspection conducted as part of the SI identified one former transformer location near Building 819 and nine current transformer locations.

Former underground storage tank S-812: A steel UST installed in 1976 was used to store fuel for a boiler located in Building 813. It is unknown when the UST was taken out of service. In August 1991, the UST and its associated piping were excavated and removed from the site. The former UST location is designated as site SI-77.

Upon completion of the SI in 1993 (PRC and HLA 1993), the Navy concluded that no further action was required at the SI sites. The EPA and Cal/EPA concurred that no action is required at these sites.

seven described above because

2.2.3 Remedial Investigation Activities at Parcel A

pls. add reason sites not problem.

Based on data collected during the SI investigation at site SI-50 (the storm drains and sanitary sewer systems), the Navy conducted an RI of the groundwater underlying Parcel A (referred to as the IR-59 site). During the groundwater investigation, the Navy discovered sandblast grit waste containing paint chips in the backfill of a sanitary sewer line in a lot along Jerrold Avenue. As a result, the Navy included this area (referred to as the IR-59 JAI site) in the RI. The results of the RI are presented in Section 2.5.

2.3

HIGHLIGHTS OF COMMUNITY PARTICIPATION

In the late 1980s, the Navy formed a technical review committee (TRC) consisting of community members and representatives of regulatory agencies. The TRC met to discuss environmental issues pertaining to HPA. In 1993, pursuant to the Defense Environmental Restoration Program, 10 U.S.C. Section 2705(d), the Navy formed a Restoration Advisory Board (RAB), which replaced the TRC. The RAB is composed of members of the community, the Navy, and the regulatory agencies. The RAB meets monthly to discuss environmental progress at HPA.

The draft RI report for Parcel A was released to the public in June 1995. The proposed plan for Parcel A was released to the public in August 1995. Both the draft RI report and the proposed plan were made available to the public in the administrative record file and in information repositories located at the City of San Francisco Main Library and the Anna E. Waden Branch Library. In addition, the proposed plan was mailed to the more than 1,100 people on the HPA project mailing list. A notice of availability of the proposed plan was published in *The San Francisco Sunday Examiner/Chronicle* on August 6, 1995; in *The Independent* on August 15, 1995; and in *The New Bayview* on August 20, 1995. A public comment period on the proposed plan was held from August 7, 1995, through September 5, 1995. A public meeting was held on August 22, 1995. At that meeting, representatives of the Navy presented the basis for the proposed no action alternative and were available to answer questions about the proposed plan. A response to the comments received at the public meeting and during the public comment period are included in the Responsiveness Summary, which is Appendix A of this ROD. These community participation activities fulfill the requirements of Section 113(k)(2)(B)(i-v) and Section 117(a)(2) of CERCLA.

2.4

SCOPE AND ROLE OF THE NO ACTION ALTERNATIVE

HPA is a large federal facility containing numerous potential source areas. To facilitate the investigation, remediation, and property transfer process under BRAC, sites on HPA have been grouped into geographical parcels.

In addition to Parcel A, five other parcels have been designated and are undergoing assessment activities. The Navy's site management strategy is to accelerate actions at sites while identifying and

What happened to this section? (see original comments attached) AS is; it is not clear how Parcel A fits in overall.

1.0 DECLARATION FOR NO ACTION AT PARCEL A

1.1 SITE NAME AND DESCRIPTION

Engineering Field Activity West (EFA WEST)
Hunters Point Annex, Parcel A
San Francisco, California

This federal facility ^{was placed} ~~is~~ on the National Priorities List (NPL). Hunters Point Annex (HPA) was deactivated and placed in industrial reserve in 1974. ^{In 1989} In 1991, HPA was selected and approved for closure under the Base Realignment and Closure (BRAC) program.

1.2 STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial action for Parcel A at the HPA in San Francisco, California, which was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

This decision is based on the administrative record for the site. The administrative record index is Attachment A of this Record of Decision (ROD).

The State of California ^{and the United States Environmental Protection Agency (US EPA)} concurs with the selected remedy.

1.3 DESCRIPTION OF THE SELECTED REMEDY : NO ACTION

The U.S. Department of the Navy (Navy) and the U.S. Environmental Protection Agency (EPA) Region IX have selected no action for the following sites at Parcel A of HPA:

- IR-59: The groundwater underlying Parcel A

- IR-59 Jerrold Avenue Investigation (JAI): The soil at a residential lot on Jerrold Avenue within Parcel A

These sites are the only two sites at Parcel A that were carried through to the remedial investigation ^{determined} (RI) stage. All other sites investigated on Parcel A were ~~found~~ to require no further action at the conclusion of the SI stage of ~~Parcel A~~ investigations.

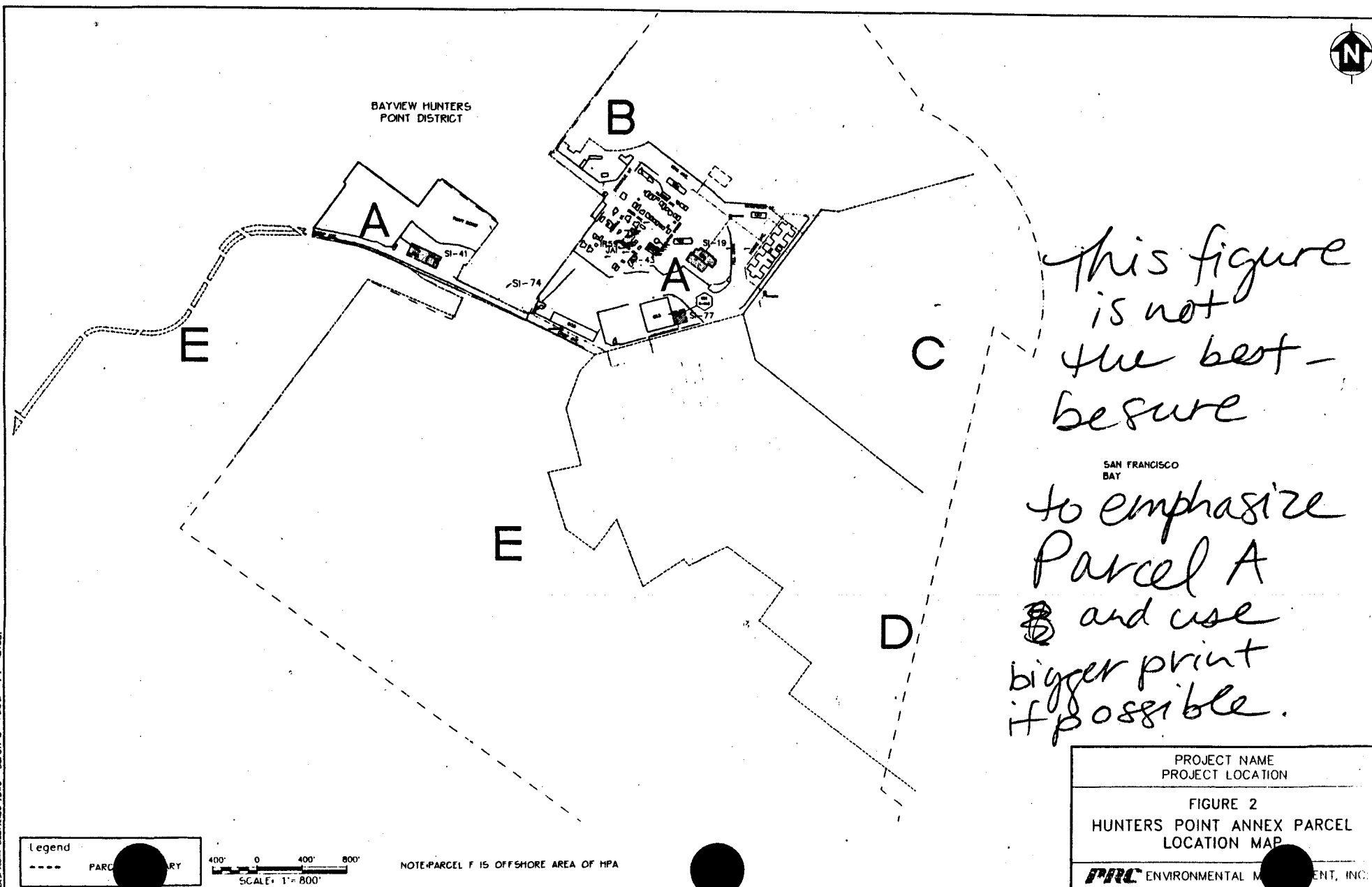
1.4 DECLARATION STATEMENT

Based on an evaluation of analytical data and other information, the Navy, (EPA Region IX, and the California Environmental Protection Agency (Cal/EPA)) have determined that no remedial action is necessary to ensure the protection of human health and the environment at Parcel A. Specifically, this ROD selects the final remedy for sites IR-59 and IR-59 JAI at Parcel A. The groundwater underlying Parcel A (IR-59) is not a potential source of drinking water. The semivolatile organic compounds (SOC) and metals detected in groundwater samples were ^{concur with the Navy's determination} present only at concentrations ^{concentrations} below EPA Region IX preliminary remediation goals (PRG). The only other substance detected, motor oil, is a petroleum product specifically excluded from the definition of "hazardous substance" and "pollutant or contaminant" in Section 101 of CERCLA. ~~Accordingly, the Navy is prevented from taking a response action on the groundwater under CERCLA authority.~~ X Although the State of California has authority to regulate the remediation of motor oil in groundwater, the State concurs that the levels in groundwater do not require further investigation, remediation, or groundwater monitoring (RWQCB 1995b). The concentrations of hazardous substances in the soil at IR-59 JAI are either within or below EPA's acceptable risk levels or, for metals, are at background levels. There

spacing here?

Please note: With the exception of Section 1.4 sentences 1 and 2 and the last sentence, ~~at the end of~~ Section 1.4 goes into much greater detail than necessary. Please see Exhibit 9-2, page 9-5 of EPA guidance document on RODs, OSWER Directive 9355.3-02. Could simply say no action is appropriate based on the fact that no unacceptable risks are present in soil on or at Parcel A.

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BAYVIEW HUNTERS
POINT DISTRICT

B

A

SI-74

A

SI-19

C

SAN FRANCISCO
BAY

E

D

Legend

--- PARCEL BOUNDARY

400' 0 400' 800'
SCALE: 1" = 800'

NOTE: PARCEL F IS OFFSHORE AREA OF HPA

PROJECT NAME
PROJECT LOCATION

FIGURE 2
HUNTERS POINT ANNEX PARCEL
LOCATION MAP

PRC ENVIRONMENTAL MANAGEMENT, INC.

move
to previous
page

are no other sites on Parcel A that require investigation or remediation. Accordingly, because hazardous substances are not present at Parcel A at concentrations above acceptable risk levels, the 5-year review requirement of CERCLA Section 121(c) does not apply.

(Name)
(Title)
Navy EFA WEST

Date

~~Ms. Felicia Marcus~~ Julie Anderson
~~Regional Administrator~~ Chief, Federal
EPA Region IX Facilities Cleanup Office

Date

(Name)
(Title)
Department of Toxic Substances Control
Cal/EPA

Date

2.0 DECISION SUMMARY FOR PARCEL A

2.1 SITE NAME, LOCATION, AND DESCRIPTION

HPA is located on a promontory in southeast San Francisco (see Figure 1). The promontory is bounded on the north and east by the San Francisco Bay and on the south and west by the Bayview-Hunters Point district of the City of San Francisco. The entire HPA covers 936 acres, 493 of which are on land and 443 of which are under water. To facilitate the environmental investigation and remediation, and ultimate transfer of the property, ^{to the City of San Francisco} HPA was divided into Parcels A through F (see Figure 2). This ROD addresses the remedy for sites at Parcel A.

Please make sure Parcel A stands out - shade it or something.

Parcel A is bounded by the other portions of HPA and the Bayview-Hunters Point district (see Figure 3). Parcel A covers approximately 88 acres. Land use adjacent to Parcel A is residential or, in the case of other HPA parcels, currently undergoing investigation and remediation for future redevelopment. Under ^{San Francisco's Proposed B-F} ~~the Community Reuse Plan~~, these parcels will ultimately be used primarily for commercial and industrial purposes. *(March 1995)*

while Parcel A will remain largely residential.

Parcel A consists of the upland area of HPA and a portion of the lowlands. Ground surface elevations at Parcel A range from 0 to 18 feet above mean sea level (msl) in the lowlands to 180 feet above msl at the ridge crest.

The peninsula forming HPA is within a northwest trending belt of Franciscan bedrock. Bedrock is present at the ground surface over most of Parcel A. In localized areas, the bedrock is overlain by fill material.

No wetlands or surface waters are located at Parcel A. Limited quantities of groundwater are present in localized fractures of the bedrock. However, Parcel A groundwater is not suitable as a potential source of drinking water because of low well yield. Groundwater from the bedrock aquifer discharges through springs and seeps along Parcel A slopes.

No underground storage tanks (USTs) ~~or subsurface structures, except for sewer lines, storm drains, and steam lines,~~ are located at Parcel A. Likewise, no aboveground tanks, drums, or hazardous materials storage areas are located at Parcel A. ~~These subsurface structures~~ Sewer lines, storm drains, and steam lines are located at Parcel A. ~~These subsurface structures~~ were included in the early ~~the~~ environmental investigations of the Parcel.

2.2 SITE HISTORY ~~AND ENFORCEMENT ACTIVITIES~~

2.2.1 Background

↑ have there been any enf. activities?

Hunters Point was first developed for dry dock use in 1867. The Navy acquired title to the land in 1940 and began developing the area for various shipyard activities. In 1942, the Navy began using HPA for shipbuilding, repair, and maintenance. From 1945 to 1974, the shipyard was primarily used as a repair facility by the Navy. The Navy discontinued activities at HPA in 1974. From 1976 to 1986, the Navy leased 98 percent of HPA, including all of Parcel A, to the Triple A Machine Shop (Triple A), a private ship repair company. In 1986, the Navy reoccupied the property. Currently, portions of Parcel A are subleased for use as artists' studios.

Throughout its history, both the Navy and Triple A used Parcel A primarily for residential purposes. In addition, the Navy used one building on Parcel A as a radiation laboratory. Most of the other structures were used as offices and warehouses. Currently, approximately 61 buildings are located on the property, 45 of which are former residences. In addition, the foundations of 43 other structures are located on Parcel A.

The Navy began environmental studies at HPA in 1984 under the U.S. Department of Defense's Installation Restoration Program. Between 1984 and 1991, the Navy performed a series of installation-wide investigations to identify potential ^{contamination} source areas (WESTEC 1984; EMCON 1987; ERM West 1988; YEI 1988a and 1988b). In addition, the Navy conducted investigations in discrete areas of Parcel A (HLA 1987 and 1988; ATT 1987). ^{Insert from page 7 here} Based on these investigations, seven areas at Parcel A, referred to as site inspection (SI) sites, were identified as potential source areas. Site-specific histories of each of these areas are provided below. ^{Insert 2 from p. 7, as an intro}

2.2.2 Site Inspection Activities at Parcel A

↑
SITE

Parking medians in front of Building 901: The landscaped medians in front of Building 901, the Officers' Club, were identified as a potential source because the medians were filled in part with sandblast waste and oily materials. The medians are referred to as site SI-19.

Buildings 816 and 818: Building 816 is the former Naval Radiological Defense Laboratory (NRDL) High Voltage Accelerator Laboratory and Building 818 is the former Chlorinating Plant. The NRDL operated until 1976. Building 818 was used for chlorinating water. Because of the presence of a former drum storage area behind Building 816, the area was identified as a potential source area. These buildings and the surrounding areas are designated as site SI-41.

and fact 816 was an NRDL facility?

Former Building 906: Building 906, the Gardening Tool House, may have been used to store pesticides. For this reason, the building was identified as a potential source area and is designated as site SI-43.

Portions of the steam line system within Parcel A: The steam line system, constructed in 1950, spans the entire installation. The system was used to supply steam to heat facility buildings and docked ships and to facilitate the flow of oil through oil lines. Steam for Parcel A was generated at boiler plants located on other parcels. The Navy identified the lines as a potential source based on the remote possibility that waste oil was transported through the Parcel A steam lines. The HPA-wide steam line system is designated as site SI-45.

Portions of the storm drain and sanitary sewer systems within Parcel A: The storm drain and sanitary sewer systems for HPA were constructed in the 1940s and 1950s as a combined system. By 1976, the two systems had been separated. Currently, the storm drains at Parcel A flow into storm drains at other parcels, eventually discharging into San Francisco Bay. Flow from the sanitary sewer system is directed to Pump Station A, which pumps sewage off site for treatment and ultimate discharge through the City of San Francisco's publicly-owned treatment works. The HPA-wide system is referred to as site SI-50.

→ is this description of SI-51 accurate based upon our latest discussion of the transformer/PCB RI Report - please update.

Former locations of transformers containing polychlorinated biphenyls: In 1988, 199 transformers were removed from service at HPA, and during an inventory of the remaining transformers, another 118 transformers were identified. Based on available records, none of these transformers were used at Parcel A. To ensure that no additional transformer locations existed at Parcel A, further investigation was conducted as part of the SI. Buildings and areas throughout HPA where transformers containing polychlorinated biphenyls (PCB) were formerly located are referred to as site SI-51.

Then why does SI-51 apply to Parcel A.

Former underground storage tank S-812: A steel UST installed in 1976 was used to store fuel for a boiler located in Building 813. It is unknown when the UST was taken out of service. In August 1991, the UST and its associated piping were excavated and removed from the site. The former UST location is designated as site SI-77.

In 1989, EPA added HPA to the NPL. In 1990, the Navy, EPA Region IX, and the State of California entered into a Federal Facilities Agreement (FFA) to coordinate environmental activities at HPA. In 1991, the U.S. Department of Defense designated HPA for closure as an active military base under its BRAC program.

As the first phase in the CERCLA process, the Navy conducted a preliminary assessment/site inspection (PA/SI) of the seven potential source areas listed above and identified during the Navy's previous investigations. Upon completion of the SI in 1993 (PRC and HLA 1993), the Navy concluded that no further action was required at the SI sites. The EPA and Cal/EPA concur that no action is required at these sites.

2.2.3 Remedial Investigation Activities at Parcel A.

As a result of the SI investigation at site SI-50 (the storm drains and sanitary sewer systems), the Navy conducted an RI of the groundwater underlying Parcel A (referred to as the IR-59 site).

During the groundwater investigation, the Navy discovered sandblast grit waste containing paint chips in the backfill of a sanitary sewer line in a lot along Jerrold Avenue. Accordingly, the Navy included this area (referred to as the IR-59 JAI site) in the RI. The draft RI report was completed in June 1995. ~~The Navy also prepared a draft feasibility study (FS) report; however, based on the~~

and the Draft Final on September 22, 1995.

this will become clear

in your responsiveness summary mention you received this comment

~~conclusion that Parcel A does not pose a risk to human health and the environment, the Navy, EPA, and Cal/EPA agreed that the FS report was not necessary, and the report was therefore not finalized.~~

The Navy has also conducted a series of facility-wide air quality investigations (ATT 1987; HLA 1992; Brown & Caldwell 1995). Human health risk assessments performed using data from these air quality investigations found that human health exposures at Parcel A are at acceptable levels.

2.3 HIGHLIGHTS OF COMMUNITY PARTICIPATION

move
to Site
risks
Section.

In the late 1980s, the Navy formed a technical review committee (TRC) consisting of community members and representatives of regulatory agencies. The TRC met to discuss environmental issues pertaining to HPA. In 1993, pursuant to the Defense Environmental Restoration Program, 10 U.S.C. Section 2705(d), the Navy formed a Restoration Advisory Board (RAB), which replaced the TRC. The RAB is comprised of members of the community, the Navy, and the regulatory agencies. The RAB meets monthly to discuss environmental progress at HPA.

In addition, the PP was mailed to the 1300 more people on the project mailing list today a review comment.

The draft RI ~~and FS~~ reports for Parcel A ^{was} released to the public in June 1995. The proposed plan for Parcel A was released to the public in August 1995. Both the ~~draft RI/FS~~ report and the proposed plan were made available to the public in the administrative record file and in information repositories located at the City of San Francisco Main Library and the Anna E. Waden Branch Library. A notice of availability of the Proposed Plan was published in *The San Francisco Sunday Examiner/Chronicle* on August 6, 1995, in *The Independent* on August 15, 1995, and in *The New Bayview* on August 20, 1995. A public comment period on the proposed plan was held from August 7, 1995, through September 5, 1995. A public meeting was held on August 22, 1995. At that meeting, representatives of the Navy presented the basis for the proposed no action alternative and were available to answer questions about the proposed plan. A response to the comments received at the public meeting and during the public comment period are included in the Responsiveness Summary which is Section 3.0 of this ROD. These community participation activities fulfill the requirements of Section 113(k)(2)(B)(i-v) and Section 117(a)(2) of CERCLA.

Preliminary Draft

2.4 SCOPE AND ROLE OF THE NO ACTION ALTERNATIVE

HPA is a large federal facility containing numerous potential source areas. To facilitate the investigation, remediation, and property transfer process under BRAC, sites on HPA have been grouped into geographical parcels.

In addition to Parcel A, five other parcels have been designated and are undergoing assessment activities. Under the current FFA schedule, the ^{Final approval} ROD dates for the other parcels are as follows:

<u>Parcel Designation</u>	<u>Final</u> <u>ROD Schedule</u> <u>Approval Date</u>
Parcel B	February 1997
Parcel C	December 1997
Parcel D	July 1997
Parcel E	May 1998

The Navy also intends to perform an ecological risk assessment for the recently designated Parcel F, which encompasses the submerged portions of HPA.

The Navy's site management strategy is to accelerate actions at sites while identifying and closing out assessment activities at sites not requiring action. This strategy allows resources to be concentrated on those areas requiring action and meets the President's goal of quickly identifying parcels of property that can be transferred to the community or other agencies under the BRAC program.

This ROD selects the remedy for the two RI sites at Parcel A. The soil at IR-59 JAI does not pose a significant risk to human health or the environment; therefore, no action is necessary for the site. Similarly, no action is necessary for IR-59, which encompasses the groundwater underlying Parcel A, for two reasons. First, SOCs and metals were detected ~~only~~ ^{that did not exceed} at levels ~~below~~ EPA Region IX PRGs. PRGs are health-based chemical concentrations, developed for a single environmental medium and a specific land-use scenario, that are used for screening purposes in site investigations. Second, the only other substance detected in groundwater was total petroleum hydrocarbons (TPH) as motor oil.

Also, as w/TPH,
no exposure
pathway
for GW so
anything in
it would not
impact human
health.

by the USEPA in San Francisco
to screen ^{potential} human
health risks at sites
during the environmental
investigations. Since levels
of haz. sub. did not exceed PRGs, ~~it~~

does no unacceptable risk

Preliminary Draft

wording needs improving. Point is, there is no exposure pathway because no one will be drinking this water - it's not a drinking H₂O source. No risk assess. (done for TPH.)

The presence of this TPH does not pose a risk to human health because groundwater is not a drinking water source and because the detected levels of TPH as motor oil are low (500 micrograms per liter or less). Moreover, TPH is not a hazardous substance as defined under CERCLA and, therefore, the Navy has no authority to take a response action under CERCLA for the TPH. Although the State of California has authority to regulate the remediation of TPH in groundwater, the State concurs that the TPH levels in groundwater do not require further investigation, remediation, or groundwater monitoring (RWQCB 1995b). In summary, based on current information, no action is required at any site on Parcel A.

explain why low - reference other RWQCB cleanup sites. Note, no PRG for TPH

2.5 SITE CHARACTERISTICS

2.5.1 IR-59

→ This statement can be confusing. If EPA lead, we can not spend funds to address non-CERCLA contaminants but Navy can spend its \$ to meet state requirements as appropriate.

The Parcel A groundwater investigation was initiated as part of the SI for the Parcel A storm drain and sanitary sewer systems (SI-50). During the groundwater assessment of these systems, groundwater collected from a boring was analyzed and found to contain SOCs, TPH as motor oil, and metals. As a result, the preliminary investigation conducted during the SI was expanded to an RI, and the groundwater under Parcel A was designated as site IR-59. Although TPH is not defined as a hazardous substance under CERCLA, TPH analysis was included in the RI analytical program.

Three aquifers underlie HPA: the A-aquifer, the B-aquifer, and the bedrock aquifer. The only aquifer present at Parcel A is the bedrock aquifer, which is the upper weathered and deeper fractured portions of the Franciscan bedrock. Groundwater in bedrock at Parcel A is present in localized fractures that are sporadic and discontinuous.

Parcel A groundwater is not a potential source of drinking water under the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) definition of drinking water because of the low yield of wells at Parcel A. Under the RWQCB's definition, groundwater is not a suitable or potentially suitable source of water for municipal or domestic water supply if it does not provide sufficient water to supply a single well capable of producing an average, sustained yield of

2.3

HIGHLIGHTS OF COMMUNITY PARTICIPATION

In the late 1980s, the Navy formed a technical review committee (TRC) consisting of community members and representatives of regulatory agencies. The TRC met to discuss environmental issues pertaining to HPA. In 1993, pursuant to the Defense Environmental Restoration Program, 10 U.S.C. Section 2705(d), the Navy formed a Restoration Advisory Board (RAB), which replaced the TRC. The RAB is composed of members of the community, the Navy, and the regulatory agencies. The RAB meets monthly to discuss environmental progress at HPA.

The draft RI report for Parcel A was released to the public in June 1995. The proposed plan for Parcel A was released to the public in August 1995. Both the draft RI report and the proposed plan were made available to the public in the administrative record file and in information repositories located at the City of San Francisco Main Library and the Anna E. Waden Branch Library. In addition, the proposed plan was mailed to the more than 1,100 people on the HPA project mailing list. A notice of availability of the proposed plan was published in *The San Francisco Sunday Examiner/Chronicle* on August 6, 1995; in *The Independent* on August 15, 1995; and in *The New Bayview* on August 20, 1995. A public comment period on the proposed plan was held from August 7, 1995, through September 5, 1995. A public meeting was held on August 22, 1995. At that meeting, representatives of the Navy presented the basis for the proposed no action alternative and were available to answer questions about the proposed plan. A response to the comments received at the public meeting and during the public comment period are included in the Responsiveness Summary, which is Appendix A of this ROD. These community participation activities fulfill the requirements of Section 113(k)(2)(B)(i-v) and Section 117(a)(2) of CERCLA.

2.4

SCOPE AND ROLE OF THE NO ACTION ALTERNATIVE

HPA is a large federal facility containing numerous potential source areas. To facilitate the investigation, remediation, and property transfer process under BRAC, sites on HPA have been grouped into geographical parcels.

In addition to Parcel A, five other parcels have been designated and are undergoing assessment activities. The Navy's site management strategy is to accelerate actions at sites while identifying and

closing out assessment activities at sites not requiring action. This strategy meets President Clinton's goal of quickly identifying parcels of property that can be transferred to the community or other agencies under the BRAC program.

This ROD selects the remedy for the two RI sites at Parcel A. The soil at IR-59 JAI does not pose a significant risk to human health or the environment; therefore, no action is necessary for the site. Similarly, no action is necessary for IR-59, which encompasses the groundwater underlying Parcel A, for two reasons. First, there are no complete exposure pathways for groundwater because the groundwater is not a drinking water source. Second, SVOCs and metals were detected only at levels below EPA Region IX PRGs. PRGs are health-based chemical concentrations used to screen potential human health risks during environmental investigations. The only other substance detected in groundwater was total petroleum hydrocarbons (TPH) as motor oil, at concentrations of 600 micrograms per liter or less. TPH is not a hazardous substance as defined under CERCLA. Although the State of California has authority to regulate the remediation of TPH in groundwater, the State concurs that the TPH levels in groundwater do not require further investigation, remediation, or groundwater monitoring (RWQCB 1995b). In summary, no action is required at Parcel A because ...

2.5 SITE CHARACTERISTICS

2.5.1 IR-59

PIS.
include
the reason in this
summary statement!

The Parcel A groundwater investigation was initiated as part of the SI for the Parcel A storm drain and sanitary sewer systems (SI-50). During the groundwater assessment of these systems, groundwater collected from a boring was analyzed and found to contain SVOCs, TPH as motor oil, and metals. As a result, the preliminary investigation conducted during the SI was expanded to an RI, and the groundwater under Parcel A was designated as site IR-59. Although TPH is not defined as a hazardous substance under CERCLA, TPH analysis was included in the RI analytical program.

Three aquifers underlie HPA: the A-aquifer, the B-aquifer, and the bedrock aquifer. The only aquifer present at Parcel A is the bedrock aquifer, which is the upper weathered and deeper fractured portions of the Franciscan bedrock. Groundwater in bedrock at Parcel A is present in localized fractures that are sporadic and discontinuous.

Parcel A groundwater is not a potential source of drinking water under the RWQCB definition of drinking water because of the low yield of wells at Parcel A. Under the RWQCB's definition, groundwater is not a suitable or potentially suitable source of water for municipal or domestic water supply if it does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day (gpd). Based on aquifer tests, Parcel A groundwater wells are unable to produce 200 gpd. The RWQCB concurs that Parcel A groundwater is not a source of drinking water (RWQCB 1995a).

During the RI, the Navy collected groundwater grab samples from open boreholes and trenches as well as samples from six monitoring wells. Samples were analyzed for volatile organic compounds (VOC), SVOCs, TPH, pesticides, PCBs, and metals. To evaluate whether further action was appropriate, analytical results were compared against EPA Region IX PRGs and federal and state maximum contaminant levels (MCL) for drinking water.

No VOCs were detected in any groundwater samples. The only SVOCs detected (naphthalene, 2-methylnaphthalene, and n-nitrosodiphenylamine) were present at concentrations below EPA Region IX PRGs. The highest concentrations of the SVOCs detected and their respective PRGs are shown on Table 1. Arsenic was detected in groundwater samples at levels above its PRG but below MCLs. Low concentrations of TPH as motor oil were detected in two small areas on Parcel A. A comprehensive discussion of the groundwater investigation and the nature and extent of the compounds detected in groundwater is presented in the RI report (PRC 1995b). In summary, no hazardous substances as defined under CERCLA were detected above health-based levels in any of the groundwater samples.

2.5.2 IR-59 JAI

The RI at IR-59 JAI was initiated upon the discovery of sandblast grit containing paint chips during the groundwater investigation at a lot along Jerrold Avenue. A sample of mixed sandblast grit and soil was analyzed and found to contain pesticides, low levels of SVOCs, TPH as diesel fuel and as motor oil, and metals.

TABLE 1

**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS^a
 IR-59 GROUNDWATER INVESTIGATION
 PARCEL A, HUNTERS POINT ANNEX**

Detected Analyte	PRG ^b	Maximum Detected Concentration
SVOCs		
2-Methylnaphthalene	NE ^c	42
Naphthalene	240	12
n-Nitrosodiphenylamine	14	12
TPHs		
TPH as motor oil	NE	600
Metals		
Aluminum	37,000	216 ^d
Antimony	15	2.1 ^d
Arsenic	0.038	3.1 ^d , 3.8 ^e
Barium	2,600	440 ^d , 449 ^e
Calcium	NE	44,700 ^d , 45,500 ^e
Magnesium	NE	38,600 ^d , 39,300 ^e
Manganese	180	28.4 ^d , 19.9 ^e
Molybdenum	180	12.4 ^d , 14.5 ^e
Nickel	730	2.3 ^{d,e}
Potassium	NE	7,310 ^d , 7,440 ^e
Sodium	NE	82,048 ^d , 83,400 ^e
Vanadium	260	3.0 ^d , 2.8 ^e

Notes:

- ^a Concentrations in micrograms per liter
- ^b EPA Region IX PRGs (EPA 1995a)
- ^c NE = Not established

- ^d Unfiltered samples
- ^e Filtered samples

and mitigate any risks associated with

The Navy used field screening analysis and investigation by excavation to characterize the nature and extent of chemicals of concern in soil and to accelerate the overall investigation of IR-59 JAI. Soil and sandblast grit were excavated and disposed of at an approved off-site facility, and confirmation samples were collected and tested using an EPA-approved immunoassay-based test method. Soil excavation and confirmation sampling continued until field testing resulted in pesticide concentrations below the detection limit. In addition, samples were sent to a laboratory and analyzed primarily for SVOCs, pesticides, PCBs, TPH as motor oil and diesel, and metals. Soil excavated during the investigation by excavation was replaced with clean soil. Tables 2, 3, and 4 summarize data on the compounds in soil after the completion of the investigation by excavation. A comprehensive discussion of the soil investigation and the nature and extent of compounds detected in soil is presented in the Parcel A RI report (PRC 1995b).

*work
could
be
improved.*

2.6 SUMMARY OF SITE RISKS

2.6.1 Human Health Risk Assessment

During the RI, the Navy considered the potential human health risks associated with sites IR-59 and IR-59 JAI. The RI risk analysis is described below.

Human exposure to groundwater at Parcel A is highly unlikely for the following reasons:

- Parcel A groundwater is present only in limited fractures or in poorly interconnected and sporadic fractures in the bedrock.
- In areas where groundwater was detected, individual wells are capable of yielding only insignificant and nonsustainable quantities of water.
- Historical records confirm that groundwater in Parcel A bedrock has never been used as a source of drinking water.
- The City of San Francisco's current groundwater policy excludes groundwater in Parcel A bedrock from future development based on the distribution of water in the bedrock and its characteristics.

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS FOR SVOCs AND PESTICIDES
AFTER INVESTIGATION BY EXCAVATION AT IR-59 JAI*
PARCEL A, HUNTERS POINT ANNEX

Detected Analyte	Detected Concentration Range	Sample Detection Frequency ^b	PRG ^c
SVOCs			
Benzo(a)anthracene	39 - 61	4 of 6	610
Benzo(a)pyrene	38 - 50	4 of 6	61
Benzo(b)fluoranthene	38 - 49	3 of 6	610
Benzo(k)fluoranthene	51 - 67	3 of 6	6,100 (610) ^d
Chrysene	56 - 180	4 of 6	24,000 (6,100) ^d
Fluoranthene	53 - 200	6 of 6	2,600,000
Indeno(1,2,3-cd)pyrene	22 - 24	3 of 6	610
Naphthalene	27	1 of 6	800,000
Phenanthrene	21 - 91	6 of 6	NE ^e
Pyrene	78 - 270	6 of 6	2,000,000
Pesticides			
4,4'-DDD	0.64	1 of 25	1,900
4,4'-DDE	0.94 - 250	21 of 25	1,300
4,4'-DDT	1.2 - 420	23 of 25	1,300
Aldrin	0.38	1 of 25	26
alpha-BHC	1.5	1 of 25	71
alpha-Chlordane	0.5 - 97	13 of 25	340 ^f
gamma-Chlordane	0.46 - 97	12 of 25	340 ^f
Heptachlor	1.7 - 37	2 of 25	99
Heptachlor epoxide	0.94	1 of 25	49

Notes:

- * Concentrations in micrograms per kilogram
- * Only samples of soil in which SVOCs or pesticides were detected after investigation by excavation are listed.
- * EPA Region IX PRGs (EPA 1995a)
- * Cal-modified PRGs (EPA 1995a)
- * NE = Not established
- * EPA Region IX PRG for chlordane (plain)

please include month Feb/Jun?
As you know PRGs were also updated 9/1/95.
} same comment applies to Table 4.

APPENDIX A

RESPONSIVENESS SUMMARY

1.0 OVERVIEW

As set forth in its proposed plan, the U.S. Department of the Navy (Navy) selected no action for the following sites at Parcel A of Hunters Point Annex (HPA):

- IR-59: The groundwater underlying Parcel A
- IR-59 Jerrold Avenue Investigation (JAI): The soil at a residential lot on Jerrold Avenue within Parcel A

These sites are the only two sites at Parcel A that were carried through to the remedial investigation (RI) stage. All other sites investigated at Parcel A were determined by the Navy, ~~EPA, and~~ *X* Cal/EPA to require no action at the conclusion of the site inspection (SI) stage of investigation. EPA Region IX and the California Environmental Protection Agency (Cal/EPA) concur with the selection of the no action remedy.

2.0 COMMUNITY INVOLVEMENT

The Navy is responsible for conducting the community relations program for HPA. A community relations plan was established in 1989 as a means of obtaining community input into the remedial program at the installation. In addition, the Navy formed a technical review committee (TRC), consisting of community members and regulatory agency representatives, to discuss environmental conditions at HPA; in 1993, the TRC was replaced by a restoration advisory board (RAB) that meets monthly to discuss environmental activities at HPA.

In addition, the Navy has established two information repositories for HPA. One information repository is at the Anna E. Waden Branch Library located at 5075 Third Street in San Francisco, and the second information repository is at the City of San Francisco Main Library located at the Civic Center in San Francisco.

A draft remedial investigation/feasibility study (RI/FS) for Parcel A was released to the public in June 1995. Based on the conclusion in the RI that Parcel A does not pose a risk to human health and the

environment, the Navy, EPA, and Cal/EPA agreed that the Feasibility Study report was not necessary. Therefore, the report was not finalized.

[^] final Parcel A RI Rpt did not include a FS component.
Prior to public release of the proposed plan, a draft was provided to the regulatory agencies for review and comment. As explained in the responses to specific comments, the comments from Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB) introduced during the public meeting were based on a July 28, 1995 letter on the earlier draft of the proposed plan. [^] As these comments were included during the public comment period, responses are provided below. ^{Responses} presented [^] received by the Navy

describe?
In August 1995, the proposed plan for Parcel A was mailed to the more than 1,100 people on the HPA project mailing list. A notice of availability of the proposed plan was published in *The San Francisco Sunday Examiner/Chronicle* on August 6, 1995; in *The Independent* on August 15, 1995; and in *The New Bayview* on August 20, 1995. Copies of the proposed plan were placed in the administrative record and the information repositories.

This mailing list has been developed over the years to include all interested community members.
A public comment period on the proposed plan was held from August 7, 1995, through September 5, 1995. A public meeting was held on August 22, 1995. These community participation activities fulfill the requirements of Section 113(k)(2)(B)(i-v) and Section 117(a)(2) of CERCLA. *the Navy*

has been able to reach through comm. outreach efforts.
The purpose of the responsiveness summary is to document public comments and questions during the public comment period (August 7, 1995 to September 5, 1995) on the proposed no action remedy for Parcel A. *and the Navy's Responses.* Specifically, this responsiveness summary provides responses to oral comments received on the proposed plan during the public meeting held on August 22, 1995, at the Southeast Community Center located in the Bayview Hunters Point neighborhood and written comments received during that meeting as well as written comments received from the City and County of San Francisco Department of Public Health (August 30, 1995) and ARC Ecology (September 2, 1995). *Please note that a transcript of the full proceedings of the August 22nd public meeting is available*

3.0 SUMMARY OF MAJOR COMMENTS
for public review at the two info. repositories

Concerns raised during the public comment period focused on the results of the human health risk assessment and the appropriateness of a deed notification. In particular, members of the local

community expressed concerns about the timing of the public meeting and the perceived slowness in the cleanup process. The six major issues raised during the public comment period are summarized below.

Issue: Why did the Navy hold a public meeting for the proposed plan for Parcel A prior to the restoration advisory board meeting?

the PP is a technical component of the Env. program.
Since the RAB is supposed to get advance notice of such information, and if the RAB was given this advance info, please include that in response.

The restoration advisory board meetings, held monthly, and the public meeting on the proposed plan for Parcel A, held on August 22, 1995, serve different purposes. The RAB meetings allow community members to participate in the technical aspects of the environmental program at HPA. Approximately 20 community members participate in these meetings. The public meeting on the proposed plan, as required under CERCLA, is intended to obtain comment from a much broader cross section of the community. In this case, the proposed plan was sent to approximately 1,100 community members to reach a broad cross-section of the community. In addition, notice of the meeting was published in three different newspapers. ✓

Issue: Did the Navy adequately investigate Parcel A?

Yes. The Navy has investigated the areas that were suspected and/or reported to be contaminated. The human health risk assessments conducted at the Parcel A sites followed the EPA's guidance and methodologies, and determined that for the future residential scenario, the residual chemicals left in place at the sites do not pose an unacceptable human health risk.

Issue: Can the Navy speed up the process of transferring the property at Hunters Point Annex?

Yes. *always* The Navy is working together with other members of the BCT. The Navy has formed BRAC Cleanup Teams (BCT) which include EPA and DTSC staff at each of their installations. The purpose of the BCT is to accelerate cleanup by including the agencies in virtually every aspect of planning and execution of the cleanup process. The Navy has requested the agencies to participate in the preparation of documents to help minimize the number of comments and promote cooperation in the cleanup process, which should shorten the time needed to complete projects. *For example, the FFA schedules were recently renegotiated.*

specific? at HPA?

and

Issue: Will the Navy abandon the wells at Parcel A?

If the wells are not transferred to the new owners, the Navy will abandon the wells at Parcel A in accordance with applicable regulations.

(Let's try to get a yes or no from City) prior to the transfer which is estimated to occur in mid 1996.

Issue: Will the Navy prepare a deed notification for the motor oil in groundwater at Parcel A?

Yes. The Navy ~~anticipates~~ ^{will} working with the RWQCB, San Francisco Redevelopment Agency (SFRA), and San Francisco City Attorney staffs to negotiate and draft language that would be acceptable to all parties concerning deed notification of the motor oil in groundwater at Parcel A. This process will occur as part of the real estate transfer process.

Issue: Is the human health risk assessment (HHRA) adequate for the Parcel A investigations?

Yes. The no action alternative was selected for Parcel A based on conclusions drawn from the nature and extent of chemicals of concern and the HHRA. The Parcel A RI HHRA was prepared using a methodology developed by the U.S. EPA for the residential scenario. The conclusions of the HHRA indicate that the Parcel A sites are protective of human health for a residential scenario. ~~The future residents of Parcel A should feel confident that they will be able to live in their new homes.~~

an investigation to determine

what if they do not? delete

4.0 SPECIFIC COMMENTS RECEIVED AND RESPONSES

The comments or questions are extracted from the transcript of the public meeting or from letters received by the Navy, and the Navy has provided written responses below. Unedited comments from RWQCB, ARC Ecology, and individuals from the community are presented below in bold text, followed by the Navy's responses. The Navy received comments that covered a range of issues.

Comments Received at the Public Meeting:

Oral comments from the public meeting from a member of the Restoration Advisory Board for Hunters Point Annex.

1

Comment:

During the question and answer portion of the public meeting an individual asked about the appropriateness of the Navy holding the public meeting on the proposed plan before the plan was discussed with the restoration advisory board.

Response:

Explain that "PP" or draft RI was discussed w/ the RAB
The restoration advisory board (RAB) and public meeting are both intended to obtain community involvement in the issues pertaining to Hunters Point Annex. The RAB consists of community individuals, who provide input on technical issues pertaining to Hunters Point Annex. A public meeting is required by EPA's community relations guidance for proposed plans. The public meeting is intended to reach a broader cross section of the community. The proposed plan was distributed to approximately 1,100 community members on August 4, 1995. The purpose, location, and date of the public meeting were discussed in the proposed plan. The meeting was also advertised in several local newspapers prior to the meeting date.

Remember, this has been discussed at a RAB meeting or should have been made. Say what happen?
~~A member of ARC Ecology~~ had the following comments on the RI/FS:

1

Comment:

Given the somewhat accidental discovery of the IR-59 JAI site, there are a few statements in the IR/FS that give us some concern, like "numerous small, artificial silt is present on the site as a result of filling, past construction, underground utility installation, and possibly filling ravines and swales." And the statement "relatively small and unmapped silt deposits" is the phrase. Those give us some concerns, because we wonder what the likelihood is that those unmapped silt deposits are, in fact, contaminated. And I would like to see this addressed somewhere in the RI/FS.

Response:

There is a very low possibility of widespread use of sandblast grit material in the artificial fill areas referred to in the Parcel A Remedial Investigation (RI) report because the areas were filled in the early 1940's as part of the preparation of the Hunters Point facility for use by the Navy or possibly even

earlier by prior owners. The sandblast grit material discovered at IR-59 JAI was probably used to backfill a utility connection to a temporary building, and was unassociated with the filling of ravines and swales.

- 2 **Comment:** This involves the Work Plan Addendum that is presented in Appendix K, and this addendum was prepared to address Agency and Redevelopment Agency concerns about VOC's in the groundwater around the former underground storage tank at SA-12. According to this addendum, four groundwater samples were to be taken on each side of the pit, some distance from the pit, to determine the extent of groundwater, possible groundwater contamination. In fact, only one groundwater sample was collected. The three other borings were dry. And I have a few questions about that sample. First, I would like to know where it is. It was not in the RI/FS where that groundwater was drawn from, which of the four borings it was taken from, so I would like to have that addressed. And I'm wondering if the sampling location that actually had water in it satisfied the San Francisco Redevelopment Agency's concern about groundwater contamination west of the site. They were quite specific about wanting to understand that there is the plume traveling to the west; and since I don't know where the sample was taken, I don't know if that concern was addressed. And then, based on this one sample, one groundwater sample, the RI/FS concludes that no substantial groundwater contamination was found at that tank site. And I would need some help understanding how that one sample proves that there is no groundwater contamination as a result of that underground storage tank, former tank, that has been removed.

Need to respond to this.

Response: *The Navy is confident that there is no gw contam.*
^ Section 3.0 of the draft final Parcel A RI report concerning former problem at underground storage tank (UST) S-812 has been revised to include more *Parcel A.* information about the locations of the borings and the groundwater sample. The groundwater sample was collected from a boring to the west of the former UST pit, to address the San Francisco Redevelopment Agency's

concerns about the possible existence of chemicals in groundwater to the west of the former UST. The analytical results from that sample and the duplicate sample indicated that there were no chemicals of concern in groundwater. Groundwater was not collected from the other three borings because groundwater was not encountered during drilling.

- 3 **Comment:** The RI/FS also does not address adequately the uncertainty associated with the conclusions presented in the RI/FS. I would like to see a little discussion about how adequate the sampling program was statistically to answer the questions that the RI/FS is supposed to answer, which is to describe the contamination at the Parcel A site. So I would like a little discussion about the uncertainty associated with the sampling and the sampling methodology and also the Risk Assessment part of the RI/FS.

*Note:
Risk Asses.
often discuss
uncertainties if
the one in the RI Rpt
did - just refer
them back.*

Response: The regulatory agencies and the Navy believe the conclusions of the draft final Parcel A RI report are supported by the data collected during the site inspections and remedial investigations. The sampling methodologies were discussed with the regulatory agencies prior to field activities. The RI report describes the sampling methodology, including the number and distribution of samples collected at each of the sites at Parcel A. Appendix E contains the human health risk assessment, which discusses the methodology and approach used by the Navy and approved by the agencies.

- 4 **Comment:** The RI/FS did a weak job of explaining to me, anyway, what the extent of the motor oil contamination is all over the Parcel A site; and I would like to see a summary in the RI/FS that addresses specifically motor oil contamination on Parcel A.

*Did the
RAB also have
review &
comment
opportunities
if yes - not.*

Response: Section 5.0 of the draft final Parcel A RI report addresses the distribution of total petroleum hydrocarbons as motor oil detected in all IR-59 groundwater samples. Total petroleum hydrocarbons as motor oil were detected at low

levels, sporadically in borings and wells in the upland portion of Parcel A and in the well in the parking lot in front of Building 101.

- 5 **Comment:** Lead contamination appears to be a problem at two sites SI-43 and SI-41. And I would like to see these areas addressed in the RI/FS, and I would like to know what action the Navy intends to take on those alleged contaminated sites. I understand that the Investigation by Excavation covered these areas with soil, but in most cases only a couple of feet of clean soil is put over these contaminated areas. And we are concerned that, as the site is developed and graded and rearranged to put buildings on it, that these areas will be exposed to the air, exposure with children and gardens and that sort of thing. They won't remain covered forever, that is the point.

Lead is not a problem at SI sites SI-43 & SI-41.

- Response:** ^ The lead levels in soil left in place at sites SI-41 and SI-43 are protective of human health and the environment. Lead concentrations associated with sites SI-41 and SI-43 are presented in the Parcel A SI HHRA. The Parcel A SI report used health based levels (HBL) developed for HPA to screen the concentrations of lead at the sites. The HBL for lead is 250 mg/kg, which is lower than the current EPA Region IX preliminary remediation goal (PRG) of 400 mg/kg. Lead was detected in seven ^{of} soil samples ranging from 9.1 to 186 mg/kg at site SI-41; however, all samples were below the lead HBL and EPA's PRG. Lead was detected in 38 ^{of} soil samples ranging from 0.26 to 178 mg/kg at site SI-43; however, all samples were below the lead HBL and EPA's PRG.

*Please
re-write
to more
clearly
address
concern.
EPA can
help if
needed.*

Written Comments Received at the Public Meeting

Comments from an individual from the Bayview Hunters Point neighborhood.

- 1 **Comment:** Is there any way to speed up the process? So many issues are to be resolved, and time is of the essence. When???

Can you state specific things the BCT has done at HPA to accelerate the cleanup process. This is too generic. Shorter review times, concurrent reviews etc.

Response: Yes, The Navy has formed a BCT which includes EPA and DTSC staff at each of their installations. The purpose of the BCT is to accelerate cleanup by including the agencies in virtually every aspect of planning and execution of the cleanup process. The Navy has requested the agencies to participate in the preparation of documents to help minimize the number of comments and promote cooperation in the cleanup process, which should shorten the time needed to complete projects.

Comments from Mr. Richard Hiatt, the California Regional Water Quality Control Board. These comments were read into the public meeting transcript and received in writing in a letter from the DTSC and RWQCB dated July 28, 1995, from Mr. Cyrus Shabahari of DTSC to Mr. William Radzevich of the Navy.

Comment: As described in the Summary of Proposed Alternatives, it is unclear if monitoring wells will be abandoned (closed) in both alternatives or only in Alternative 2. Both alternatives should properly close all monitoring wells that will not be in service. Further clarification is required. The costs associated with well closing are nominal in comparison to the overall project and should not be the reason for alternative selection. Therefore the difference in these "alternatives" appears to be the deed notification.

Response:

This RWQCB comment refers to the draft Parcel A RI/FS report. In the draft version of the report an FS was included which had two no action alternatives, as mentioned above. Following EPA guidance on preparation of a Record of Decision (ROD), only one no action alternative is discussed in the proposed plan for Parcel A. Closing of the wells was only considered in Alternative 2 in the draft Parcel A RI/FS report. The FS was deleted from the draft final Parcel A RI-report after the Navy received concurrence from the agencies that it was not necessary. The Navy is not abandoning the wells to give the future owner the option to use the wells for monitoring. The cost of closing the wells was not a major consideration for selecting Alternative 1. If the wells are not transferred the Navy will abandon them in accordance with applicable

In addition, it should be noted that all of the wells covered and pad-locked to prevent tampering.

The Navy will discuss w/ the city whether or not the city would like to keep the wells. If the city does not need the wells, then as appropriate prior to transfer of parcel A.

redundant
~~are not transferred~~ the Navy will abandon them in accordance with applicable regulations. As noted, the deed notification is the major difference between Alternatives 1 and 2.

- 2 **Comment:** Board staff have previously discussed property transfer concerns and deed notification requirements, for the residual motor oil pollution in groundwater, with Navy staff and their consultants. Board staff concur that based on the level of effort expended in these investigations and the type of pollution found, the concentrations of motor oil detected in groundwater within the Parcel A bedrock does not require further investigation, remediation or groundwater monitoring. However, as stated in the draft RI, the groundwater at Parcel A is not well characterized due to the inherent complexities within the bedrock formation. Because of these complexities Board staff have always maintained that deed notification should be included as part of any no action alternative for Parcel A. The purpose of a deed notice is to alert potential buyers and developers. It is not intended to thwart development or stigmatize the property. Disclosure of past and present environmental problems is part of the most, if not all, real estate transactions. HPA is no exception. Board staff are available to work with the City and Navy staff to draft acceptable language that meets all parties needs.

Response: The RWQCB concurred with the Navy that motor oil detected in groundwater within the Parcel A bedrock does not require further investigation, remediation, or groundwater monitoring. The Navy ^{will} ~~anticipates~~ working with the RWQCB staff to negotiate and draft language that would be acceptable to all parties concerning deed notification for the motor oil in groundwater at Parcel A for the real estate transfer process.

Other Written Comments Received During the Public Comment Period

- 1 **Comment:** We have reviewed the draft final proposed plan for Parcel A and have the following comments. As proposed by the Navy, the difference between the "no action" alternative versus a "limited action" alternative (as described in the Parcel A RI/FS) is the deed notification and the abandonment (closing) of wells on Parcel A. The Navy should properly abandon the wells on Parcel A regardless of the decision it makes for the proposed plan and the well abandonment should not be part of the proposed plan decision. The proper abandonment of all wells on Parcel A should be considered part of completing the environmental cleanup and properly closing the site. Contaminated sites under the oversight of the Department of Public Health are issued final closure notices only when well abandonment has been completed, as required under California Well Standards, Bulletin 74-90. These standards should be considered an ARAR for the Navy on Parcel A.

The well abandonment should not be a factor in the proposed plan, because it has no impact on environmental contaminants or exposures. The wells themselves are not contributing to or reducing environmental contaminants or exposures, they are just a way to monitor and take samples of the groundwater. If left in place, wells can become conduits for further groundwater contamination (e.g., if someone accidentally pours something down the wells) and therefore are required to be properly removed in order to complete closure of a site. The only reason to consider leaving the wells in place is if the San Francisco Redevelopment Agency (SFRA), as part of the reuse planning, is interested in keeping and reusing these wells on the property. The Navy should discuss this issue with the SFRA.

rewrite per previous comment
Response: The Navy is not abandoning the wells to give the future owner the option to use the wells for monitoring. If the wells are not transferred, the Navy will abandon them in accordance with applicable regulations.

2 **Comment:** As far as the deed notification is concerned, we understand from the Regional Water Quality Control Board's (RWQCB) comments of July 27, 1995, that the RWQCB has requested that deed notification be included as part of the Navy's proposed plan. RWQCB staff also stated that they will work with City and Navy staff to draft acceptable language that meets all parties needs. The Navy should consult with the SFRA and the City Attorney to draft deed notification language that will be acceptable to all parties.

Response: The Navy anticipates working with the RWQCB, SFRA, and San Francisco City Attorney staffs to negotiate and draft language that would be acceptable to all parties concerning deed notification for the motor oil in groundwater at Parcel A for the real estate transfer process.

3 **Comment:** In addition to these comments about the overall proposed plan, we have a concern with the statements on page five concerning the risks from ingestion of fruits and vegetables. An example is given comparing the risk to that of a child eating 30 pounds of fruits and vegetables grown at the site each year. If you are going to have such an example you should describe why this scenario is unlikely or why it is not of concern and give a comparison of the amount of fruit and vegetables that an average child eats per year.

Response: HHRA's are generally conducted using two approaches: the reasonable maximum exposure (RME) and average scenario. The HHRA for Parcel A was conducted using an RME scenario which assumes the highest exposure that is reasonably expected to occur at a site. EPA recommends that RME and average exposure factors be used to estimate risks and hazards for typical

exposures. The HHRA assumed a child consumes 12 pounds of vegetable and 18 pounds of fruit per year grown at the site. The HHRA also assumes that contamination was spread evenly throughout the site. Toxicity factors specific for the RME used the EPA Region IX PRG.

So is it
18 veg. or
fruit.

P/s.
Correct
the statement
that is
incorrect

In the HHRA, a child is assumed to consume 30 pounds of fruits and vegetables per year, 12 pounds of fruits and 18 pounds of vegetables, grown at the site. As mentioned previously, those are the RME exposure parameters. EPA suggests using the RME and a central tendency or average exposure parameters. The RME assumption overestimates the hazards because a garden in a residential plot in San Francisco is not expected to produce enough fruits and vegetable for the child to consume these quantities. Per discussions with San Francisco planning and zoning department on September 22, 1995, the average residential lot size in San Francisco is 2,500 ft². The central tendency estimate would use a consumption of home-grown produce of an order of magnitude less than that of the RME exposure parameters, or 1.2 pounds of fruit and 1.8 pounds of vegetables, than what was used in the HHRA. Using the central tendency exposure parameters, the carcinogenic risks and noncarcinogenic hazards associated with the ingestion of home-grown produce would fall below EPA's acceptable level.

Arc Ecology had two broad areas of concern: residual contamination at five of the nine Site Investigation (SI) and Remedial Investigation (RI) sites and poor characterization of issues concerning the parking lot spring.

These two primary comments and the Navy's responses to these comments are presented below:

- 1 Comment:** Arc supports prompt transfer of clean properties that maximize reuse options to the City of San Francisco. Since the City of San Francisco anticipates that Parcel A will be redeveloped for residential purposes, it seem only prudent that all of Parcel A be cleaned to residential standards. The Navy must ensure that filled areas remain protective of health, even when uncovered as a result of site grading and excavation for new foundations during planned reconstruction.

APPENDIX A
RESPONSIVENESS SUMMARY
PAGE A-14

COMMENTS ON DRAFT
RECORD OF DECISION, PARCEL A

THE ABOVE IDENTIFIED PAGE IS NOT
AVAILABLE.

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SOUTHWEST DIVISION TO LOCATE THIS PAGE.
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PLACEHOLDER AND WILL BE REPLACED
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DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
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TELEPHONE: (619) 532-3676

10⁴ are considered protective of human health by the
Environmental Protection Agency.

We based our comments on information presented in the DRAFT Parcel A Remedial Investigation/Feasibility Study Report, Dated June 30, 1995. We understand that PRC intends to substantially revise this report before producing the Draft Final RI/FS. This, too, causes us to question the appropriateness of proposing "no action" at this time.

Since the remaining contaminated areas are small compared to total Parcel A acreage, Arc sees no reason why cleaning these sites to residential standards should delay transfer of title to the City, or for that matter delay redevelopment efforts. In the meantime, before full cleanup, the Navy should post warnings and restrict activities on the still-contaminated SI/RI sites until they indeed pose no threat to human health.

Response:

an investigation conducted to determine

The no action alternative was selected for Parcel A based on conclusions drawn from the nature and extent of chemicals of concern and the HHRA. The Parcel A RI HHRA was prepared using a methodology developed by the U.S. EPA for the residential scenario. The conclusions of the HHRA indicate that the Parcel A sites are in a state that is protective of human health for a residential scenario. ~~The future residents of Parcel A should feel confident that they will be able to live in their new homes.~~

answer concisely first!
e.g. - The Navy would like to emphasize that residual soil contamination is at health protective levels.

In bullet items 1 and 2 hazard indices were probably overestimated because the HHRA assumed that chemicals were spread evenly throughout the site; most chemicals of potential concern can be attributed to individual point sources. The chemicals at the Parcel A sites are primarily located beneath 0.5 to 5.5 feet of clean soil. The roots of some fruit trees and most vegetables are within the 0 to 2 feet below ground surface. The organic chemicals of concern were detected in only a few of the samples collected (less than 10

better explain.
what you
mean is a
higher level
was plugged
into the
RA? Therefore
overestimate

percent). Because organics were detected in relatively few samples, the maximum detected value was used in the HHRA. Because the maximum detected value was used, the risks and hazards for these organic chemicals may have been overestimated. Also, only a few of the inorganic chemicals of concern were detected above ambient concentrations. However, since manganese and chromium exceeded their ambient concentrations in at least one sample, the inorganic chemical of concern was evaluated. Because of the elevated concentrations of inorganics in a few sampling locations that exceeded ambient concentrations (less than 10 percent), the risks and hazards calculated largely overestimates risks to human health.

The HHRA used toxicity factors listed in the EPA Region IX PRGs in the risk and hazard calculations for the ingestion of home-grown produce. The toxicity factor applied under RME scenarios, furthermore, overestimated the risks and hazards. The toxicity factor used for manganese was 0.005 which was developed for the ingestion of manganese through drinking water. A toxicity factor for the ingestion of manganese was developed for food at 0.14. The difference is approximately 2 orders of magnitude. Manganese was the hazard driver at SI-19, SI-41, and IR-59 JAI. Using the appropriate toxicity factor, the hazard due to manganese would fall well below EPA's acceptable risk levels. Additionally, manganese is found at the range of ambient concentrations in soil, however, specific ambient concentration for manganese have not been developed for HPA. Chromium was evaluated assuming that chromium is present as chromium VI. In general, chromium in soils is present as either elemental chromium or chromium III. Using the toxicity for chromium III (1) rather than the toxicity factor for chromium VI (0.005) would reduce the hazard by at least 2 orders of magnitude. Therefore, the hazards associated with chromium would be well below EPA's acceptable level.

For information concerning lead concentrations see oral comment and response from ARC Ecology Comment 5.

Future residents at IR-59 JAI may be exposed to chemicals through direct soil exposure and through ingestion of homegrown produce. The potential risks associated with direct soil exposure were determined using the EPA Region IX PRGs, the potential risks related to ingestion of homegrown produce were calculated using standard EPA risk assessment methodology. To account for all potential risks, from both detected soil exposure and ingestion of produce the residential carcinogenic risk (CR) of 2×10^{-3} was calculated for the first 30 years of life. The CR is primarily driven by chromium, benzo(a)pyrene, and heptachlor. Chromium is estimated to be a risk driver at a CR of 2×10^{-3} because the HHRA was prepared using a conservative approach assuming that chromium is present as chromium VI. In general, chromium in soil is present as either elemental chromium or chromium III. Using the PRG for total chromium (which is more representative), the total estimated CR at IR-59 JAI under the residential use scenario is estimated to be 7×10^{-6} , which is within EPA's acceptable risk range. Accordingly, under a residential use scenario, no significant carcinogenic risks are expected from exposure to IR-59 JAI soils.

The draft final Parcel A RI report was revised to incorporate comments from the EPA, Cal/EPA, RWQCB, and ARC Ecology, ~~all of which supports the no action alternative.~~ The Navy, with concurrence from EPA and Cal/EPA, ~~is moving forward to transfer the Parcel A property as rapidly as possible.~~

2

Comment:

~~has determined that NFA is required at Parcel A because.~~ Therefore, the Navy is preparing to transfer Parcel A to the city in mid 1996. The parking lot spring area presents Arc with another source for concern. One water sample collected at the spring showed motor oil contamination. Although the Draft RI/FS gives little reason to suspect that groundwater contributes to contamination around the spring. Arc believes it is too early to conclude that contamination in or around the spring poses no threat to human health or the environment. Was this contamination an isolated incident? If not, where is the motor oil coming from? Could the spring offer a pathway for contaminants to enter the groundwater? Is the area biologically sensitive? Arc requests that access by children to the

spring be restricted, that the area be protected from development, and that a program of quarterly monitoring be maintained until these questions are answered.

Response: The presence of total petroleum hydrocarbons as motor oil in groundwater has only been observed in isolated areas. ^{yes,} The spring is in the middle of a parking lot, and is not ⁱⁿ an environmentally sensitive area. The flow path of groundwater at the parking lot spring is artesian, so water is flowing out of the ground. Based on these factors the Navy with concurrence from the EPA and RWQCB have concluded that the concentrations of total petroleum hydrocarbons as motor oil detected in groundwater within the Parcel A bedrock do not pose a threat to human health or the environment, or require further investigation, remediation, or groundwater monitoring.

please ReThink This response. As Written it creates more questions - for example, Could surface water now transport Contaminants above ground, etc.

It appears ^{that} All of the questions in this section have not been answered. I recommend that each question be specifically addressed.